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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,919	10/10/2001	Gregory K. Woods	000153	1081
23696	7590	02/17/2006	EXAMINER	
QUALCOMM, INC 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			RYMAN, DANIEL J	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,919

Applicant(s)

WOODS ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-17 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 4,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Examiner acknowledges Applicant's filing of an RCE on 30 November 2005.
2. Applicant's arguments, filed in the RCE, have been fully considered but they are not persuasive regarding claims 1 and 2. As outlined below, Examiner maintains that the newly added limitations are obvious in view of the previously cited prior art.
3. Applicant's arguments, see Response, filed 30 November 2005, with respect to claim 4-17 have been fully considered and are persuasive. The rejection of claim 4-17 has been withdrawn.

Claim Objections

4. Claim 4 is objected to because of the following informalities: in line 5, "buffer" should be "buffers"; in line 6, "input" should be "inputs"; in line 6, "enable and disable" should be "enables and disables"; in line 7, "through said buffers" should be "each of said buffers"; in line 12, "input" should be "inputs"; in line 12 "buffer" should be "buffers"; in line 19, "interface" should be "interfaces"; in line 22, "interface" should be "interfaces"; and in line 25, "interface" should be "interfaces". Appropriate correction is required.
5. Claim 8 is objected to because of the following informalities: in line 1, "output of said" should be "output of each said", and, in line 2, "and said" should be "and each said". Appropriate correction is required.
6. Claim 9 is objected to because of the following informalities: in line 1, "output of said" should be "output of each said", and, in line 2, "and said" should be "and each said". Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvignac et al. (USPN 6,195,335), of record, in view of Meyer (USPN 5,933,449), of record.

9. Regarding claim 1, Calvignac discloses an apparatus for selectively interconnecting a plurality of ports, comprising: a cross-bar switch (ref. 110) (col. 2, lines 19-25 and col. 3, lines 16-18), having a plurality of input and outputs (col. 2, lines 19-25 and col. 3, lines 11-15), and a controller (input and output scheduler) (col. 2, lines 29-33; col. 2, lines 37-49; and col. 4, lines 17-20 and col. 4, lines 36-44), operable to control said cross-bar switch to interconnect any one of said plurality of inputs and any one of said plurality of outputs (input-output pair) by selectively enabling a control output associated with the interconnection of the inputs and outputs (col. 2, lines 19-22), wherein said cross-bar switch includes a plurality of digital buffers (col. 2, lines 23-25 and col. 3, lines 44-50).

Calvignac does not expressly disclose that the plurality of input and outputs comprise a plurality of bi-directional data ports. Meyer teaches, in a crossbar switching system, the plurality of input and outputs comprise a plurality of bi-directional data ports “[i]n order to allow an ensemble of machines to be interconnected in a flexible fashion” (col. 1, lines 31-38). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have

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the plurality of input and outputs comprise a plurality of bi-directional data ports in order to allow an ensemble of machines to be interconnected in a flexible fashion.

Calvignac further does not expressly disclose that the controller enables a single control output associated with the bi-directional interconnection of the two of said plurality of bi-directional data ports. Meyer teaches enabling a single control output (where “single control output” is broadly defined to be the output of the active switch configuration memory) associated with the bi-directional interconnection of the two of said plurality of bi-directional data ports (where the switch configuration memory is “associated with the bi-directional interconnection” of two of the ports since the memory enables the connections for the bi-directional communication between all ports) (col. 4, lines 9-12 and col. 4, lines 26-34) in order to flexibly interconnect communication ports (col. 1, lines 15-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the controller enable a single control output associated with the bi-directional interconnection of the two of said plurality of bi-directional data ports in order to flexibly interconnect communication ports.

10. Regarding claim 2, Calvignac in view of Meyer discloses adapting said plurality of bi-directional ports to interconnect RS-232 ports (Meyer: col. 12, line 59-col. 13, line 15).

Allowable Subject Matter


11. Claims 4-17 allowed. The prior art does not disclose or fairly suggest that each of the plurality of control outputs is coupled to the control inputs of two of the plurality of buffers.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Daniel J. Ryman
Examiner
Art Unit 2665


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SUPERVISORY PATENT EXAMINER
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